

Title (en)  
Wobble plate type compressor.

Title (de)  
Taumelscheibenverdichter.

Title (fr)  
Compresseur du type à plaque de nutation.

Publication  
**EP 0452081 B1 19940629 (EN)**

Application  
**EP 91303103 A 19910409**

Priority  
JP 9312390 A 19900410

Abstract (en)  
[origin: EP0452081A1] This invention is directed to a wobble plate type refrigerant compressor. The compressor includes a housing having a cylinder block provided with a plurality of peripherally located cylinders (70), a front end plate and a crank chamber defined by the front end plate and the cylinder block. A piston (71) is slidably fitted within each of the cylinders (70). A drive shaft (26) is connected to a rotor which is connected to a slant plate (50). A wobble plate (60) is disposed on an inclined surface of the slant plate (50). A connecting rod connects the wobble plate (60) with each of pistons (71). Both ends of the connecting rod are coupled to the wobble plate (60) and the piston (71) by a ball-and-socket joint, respectively. The ball-and-socket joints provided at the wobble plate (60) are peripherally located. A rotation preventing device for preventing rotation of the wobble plate includes a fork-shaped slider (611) attached to an outer peripheral end of the wobble plate (60) and a sliding rail (612) held between the cylinder block and the front end plate. The center (W1-W7) of the ball-and-socket joints provided at the wobble plate (60) are radially shifted toward the rotational direction of the cam rotor from the center (P1-P7) of ball-and-socket joint provided at each of pistons (71) with a predetermined angle (  $\beta$  ), thereby preventing a cyclic collision between the fork-shaped slider (611) and the sliding rail (612) while the cam rotor rotates. <IMAGE>

IPC 1-7  
**F04B 27/08**

IPC 8 full level  
**F04B 27/08** (2006.01); **F04B 27/10** (2006.01)

CPC (source: EP KR US)  
**F04B 25/04** (2013.01 - KR); **F04B 27/1054** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB IT SE

DOCDB simple family (publication)  
**EP 0452081 A1 19911016; EP 0452081 B1 19940629**; AU 637210 B2 19930520; AU 7413491 A 19911017; CA 2040149 A1 19911011; CA 2040149 C 19951205; CN 1023421 C 19940105; CN 1056342 A 19911120; DE 69102671 D1 19940804; DE 69102671 T2 19941103; JP 2943935 B2 19990830; JP H03294668 A 19911225; KR 100188613 B1 19990601; KR 910018670 A 19911130; US 5140903 A 19920825

DOCDB simple family (application)  
**EP 91303103 A 19910409**; AU 7413491 A 19910405; CA 2040149 A 19910410; CN 91103059 A 19910410; DE 69102671 T 19910409; JP 9312390 A 19900410; KR 910005692 A 19910410; US 68304491 A 19910410